

**EFFECTIVENESS OF A PROPOSED READING
METHOD IN TEACHING READING SKILLS TO
GRADE THREE LEARNING DISABILITIES
STUDENTS WITH READING DIFFICULTY IN
JORDAN**

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Thesis submitted in fulfillment of the requirements

for the degree of

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Appendix E Proposed Reading Method Manual
Appendix F Reading Test Instrument
Appendix G Reading Test Instrument – Answer Scheme
Appendix H Summary Results of The Observation Study

LIST OF PUBLICATIONS & SEMINARS

- 1.1 Moh'd, A. K., Mey, S. C., & Eng, T. K. (2008, 18-20th June 2008). *Effectiveness of a Proposed Reading Method in Teaching Reading Skills to Third Elementary Grades Students with Reading Difficulty Among Learning Disabilities in Jordan*. Paper presented at The International Conference on Social Sciences and Humanities 2008 (ICoSSH'08), Universiti Sains Malaysia, Penang, Malaysia.
- 1.2 Ahmad Khlayef Moh'd, & Mey, S. C. (2009, 6-7 January 2009). *Counseling for Families with Special Needs Children: A Review of Jordan System*. Paper presented at the International Counseling and Social Work Symposium: New Frontier Of Helping, Kompleks Eureka, USM, Penang. Malaysia, pp.115-122.

**KEBERKESANAN KAEDAH BACAAN TERCADANG DALAM
PENGAJARAN SKIL BACAAN KEPADA PELAJAR BERMASALAH
PEMBELAJARAN GRED TIGA YANG MENGALAMI KESUKARAN
MEMBACA DI JORDAN**

ABSTRAK

Fenomena peningkatan kadar kegagalan dalam pendidikan asas berpunca dari masalah pembelajaran (*Learning Disabilities (LD)*) di mana kesukaran membaca adalah masalah utama. Sorotan kajian telah mendapati bahawa kaedah tradisional dalam pengajaran skil membaca adalah tidak berkesan. Maka usaha gigih di kalangan pendidik amat perlu untuk mencari strategi, kaedah dan teknik yang baru bagi memperbaiki pembacaan. Kajian ini bertujuan untuk membangunkan satu kaedah pengajaran pembacaan kepada pelajar LD berasaskan kombinasi kaedah Gillingham dan teori pembangunan sosial Vygotsky, serta untuk menguji keberkesanan kaedah yang tercadang. Sampel kajian meliputi enam puluh pelajar Gred Tiga Asas yang sukar membaca, dipilih oleh pengajar bilik sumber secara rawak dan setimpal. Sampel ini terbahagi kepada dua kumpulan. Kumpulan experimental menerima kaedah pembacaan tercadang dan kumpulan kawalan menerima kaedah lazim. Pengajaran dibuat selama tujuh minggu dan kemudiannya pascaujian dilakukan.

Hasil penemuan menunjukkan bahawa ada perbezaan statistik yang signifikan antara min pascaujian kedua-dua kumpulan dan cenderung kepada kumpulan experimental dalam kelima-lima unit manual pembacaan tercadang dan dalam keseluruhan kaedah. Hasil ini dikukuhkan dengan kadar respon pelajar yang boleh diterima semasa pemerhatian sesi pengajaran dijalankan. Ada kemungkinan bahawa pencapaian pembacaan pelajar yang lebih baik telah terlaksana dari pengajaran kaedah tercadang yang telah berjaya menggunakan latihan bunyi bagi huruf, perkataan, suku kata, ayat dan perenggan secara tersusun dan berturutan, dari bawah ke atas, dari senang ke susah, dari latihan yang berulang-ulang; melalui kerjasama “guru-pelajar” serta “pelajar-pelajar”.

EFFECTIVENESS OF A PROPOSED READING METHOD IN TEACHING READING SKILLS TO GRADE THREE LEARNING DISABILITIES STUDENTS WITH READING DIFFICULTY IN JORDAN

ABSTRACT

The increasing concern on the phenomenon of high failure rates in elementary schools is sourced to learning disabilities (LD), of which reading difficulty emerged as a major problem. Previous studies showed that the traditional method in teaching reading skills has been ineffective. Thus, there need to be concerted efforts among educationalists in finding new strategies, methods and techniques to improve reading. This study aims to develop a method in teaching reading to LD students based on a combination of Gillingham's method and Vygotsky's social development theory and to test the effectiveness of the proposed method. The study sample comprised sixty Third Grade Elementary students with reading difficulty, randomly selected and matched by the resource room teachers. The sample was then divided into two groups. The experimental group received the proposed reading method and the control group the presently used method for seven weeks, after which a post-test was administered.

The findings showed there were statistical significant differences between the post-test means of the experimental group against the control group, in favor of the former in all the five units that made up the proposed reading manual and in the overall method. These results are corroborated by the acceptable response rates observed from students during the teaching sessions of the proposed reading method. It is likely that improvement in students' reading is achieved from the teaching of the proposed method which has successfully embodied sound training of letters, syllables, words, sentences and paragraph in an organized and sequential way, from bottom-up, from easy to difficult, from its repetitive exercises; through the 'teacher-student' and 'student-student' collaboration.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Special education was developed in the twentieth century and the Arab countries started paying attention to special education at the end of the twentieth century. Jordan, the target country of this study, is one of the Arab countries that have started placing disciplined emphasis on this educational issue (Al Rosan, 2001).

This chapter starts with the background of the study on a description of Jordan's location and school population. Then it explains on the establishment of the Special Education department, concepts of special education, the definition of learning disabilities and reading concepts and factors affecting reading, reading ability and difficulty. The chapter proceeds to include the statement of the problem, the purpose of the study, research questions, hypotheses, significance and limitations of the study and some definitions of terms. The chapter concludes with an overview of the whole study.

1.1 Background of the Study

The Arab countries comprise 21 nations covering a total area of 13,931,092 km². Their main language is Arabic (The Jordanian Geographic Centre, 2002). Jordan is located in the Asia continent and is surrounded by Syria in the north, West Palestine in the west, Iraq in the east and Saudi Arabia in the south (Mohaftha, 2001).

The total number of Jordan population at the beginning of the 21st century was about five million. Her official language is Arabic, but English is the second language. These languages are taught in schools and universities.

There are a total of 5,348 schools, of which the total elementary schools to the tenth class amounted to 2,845 and the total number of elementary students from the first to the fourth class, amounted to 538,882. The total number of students in all levels of schools amounted to 1,439,845 (Jordan Ministry of Education, 2005-2006).

1.2 Special Education Department in the Jordan Ministry of Education

The Ministry of Education in Jordan started to show concern for children with special needs since 1980, and began experimenting at the beginning of the teaching session of 1982/83 after they have conducted an educational survey. From the survey, they found that a high number of students with special needs involved motor visual, mental, hearing, psychology and speech disorder impairment. Then the Ministry, with the help of the Queen Alia Social Fund, started opening special classes or resource rooms in the government schools for slow learning students soon after the first Educational Development Conference in 1987. The main recommendation from that conference is that education is a right for each person and that there need to be greater attention to the teaching of students with special needs.

In the ensuing years, the legislative law No. (12) (1993) Article (B/2) was passed which stipulated that the Ministry of Education would make available all types of education for special needs students according to their abilities and this has compelled Education Officers in all districts to accept these students. In the following year, the Education Law No. (3) (1994) (6/3) determined that education is a social necessity and provides rights for all people according to their abilities, while Article (C/5) confirms the types of education in educational department involves special education programs for the gifted and special needs students.

By 1998, the Ministry of Education saw the need to care for learning disabilities and began establishing programs and make plans to help those students. Subsequently, by 2002, the Ministry of Education set up a department called the Special Education Department and established a resource room in each school for students with special needs (Jordan Ministry of Education, 2005-2006a).

1.2.1 Concept of Special Education

Special education is defined as *special* educational programs that help exceptional individuals to develop their abilities to a maximum possible limit, achieve self-confidence and

help them in adaptation (Al Rosan 2001). The exceptional individuals categorized under the special education umbrella are the talented and special needs. The special needs include those with various types of impairments such as mental, visual, hearing, emotional and motor; those with Learning Disabilities, Language and Speech Disorders and finally, autism.

In the case of Jordan, the concern for exceptional individuals resulted in the establishment of therapeutic educational programs, centers and special education programs in schools. In 1960 there were 50 schools available for special needs and 10 schools for motor impairments (Al Rosan, 2001), but in 2006, the numbers have grown to 144. Table 1.1 shows the distribution of special education centers according to the various types of impairments.

Table 1.1: Number of Special Education Centers in Jordan by Impairment Types, 2006

Types of Impairment	Government	Private	Association	International Organizations	Total
Mental	13	25	30	1	69
Hearing	12	0	11	0	23
Visual	1	0	2	1	4
Motor and Cerebral Palsy	0	0	4	1	5
Mental and Hearing	0	1	6	0	7
Autism	0	2	0	0	2
Multiple Impairments	3	2	9	9	23
Cerebral Palsy	0	0	10	0	10
Mental and Cerebral Palsy	0	1	0	0	1
Total	29	31	72	12	144

Source: Jordan Ministry of Social Development, 2006

In terms of number of special needs students, there were a total of 17,085 students in 1979 (Queen Alia Jordan Social Welfare Fund, 1979) but in 2002, the number has increased to 41,692, an increase of 144%. According to the Jordan Ministry of Social Development (2002), these are students with impairments and they may also have learning disabilities (see Table 1.2).

Table 1.2: Number of Children with Special Needs and Their Impairments in Jordan, 2002

Type of Impairment	No. of Children with Special Needs
Mentally	20053
Hearing	4643
Motor	1145
Visual	3205
Mental and hearing	203
Cerebral palsy	2021
Rehabilitation	322
Multi impairments	10100
Total	41, 692

Source: Jordan Ministry of Social Development, 2002

1.2.2 Learning Disabilities

Learning Disabilities (henceforth LD) is an important issue in Special Education and Jordan is particularly concerned with this issue. Therefore, much attention has been given to alleviate this, for e.g. by establishing the National Centre for Learning Disability to provide services to help children with LD, their families and teachers. As mentioned in Section 1.3, this comes after the First Education Development Conference in 1987 (Jordan Ministry of Education, 2002).

1.2.2.1 LD Definitions

LD is defined differently by many authors. This section provides various definitions of LD by Kirk and Bateman (1962), The US Educational Department (1977), The National Joint Committee on LD (1994), The National Advisory Committee on Handicapped Children (1968) and Al Waqfi (1998) for The Jordan National Centre for LD. These definitions are categorized into two parts: the educational and the medical perspectives.

1.2.2.2 Educational Definitions

a) Kirk and Bateman's (1962) Definition of LD

“A *learning disability* refers to a retardation, disorder, or delayed development in one or more of the processes of speech, language, reading, writing, arithmetic, or other school subjects resulting from a psychological handicap caused by a possible cerebral dysfunction and/or emotional or behavioral disturbances. It is not the result of mental retardation, sensory deprivation, or cultural and instructional factors.” (Kirk & Bateman, 1962:263). This definition concentrates on the difference between the academic results achieved against the mental ability of the individual student.

b) The US Educational Department (1977) Definition of LD

“The term “specific learning disability” means a disorder in one or more of the psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, speak, read, write, spell, or to do mathematical calculations. The term does not include children who have LD which are primarily the result of visual, hearing, or motor handicaps, or mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage” (U.S. Office of Education, 1977:65083).

c) The National Advisory Committee on Handicapped Children (1968) Definition of LD

The earlier definition originated and was adopted from the NACHC definition which read, “Children with special (specific) *learning disabilities* exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken and written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling, or arithmetic. They include conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include *learning* problems that are due primarily to visual, hearing, or motor handicaps, to mental retardation, emotional disturbance, or to environmental disadvantage” (US Office of Education, 1968:34; NACHC, 1968:4).

d) The National Joint Committee (1994) Definition of LD

“Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Problems in self-regulatory behaviors, social perception, and social interaction may exist with *learning disabilities* but do not by themselves constitute a *learning disability*. Even though a *learning disability* may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, social and emotional disturbance) or environmental influences (e.g., cultural differences, insufficient/ inappropriate instruction, psychogenic factors), it is not the result of those conditions or influences” (National Joint Committee on *Learning Disabilities*, 1994:65-66).

e) Jordan National Centre Definition of LD

Jordan National Centre for Learning Disabilities defines LD as a heterogeneous group of disorders emitting from inside of the individual which is ascribed to dysfunction in central nervous system. LD is seen as difficulties represented in acquiring and employing the skills of articulation, non-articulation and ideational skills of the individual.

LD is associated with non-self-organization and social interaction problems. It is not necessarily ascribed to sensory, mental, emotional, social impairments and external effects such as the cultural differences and inappropriate education (Al Waqfi, 1998).

1.2.2.3 Medical Definitions

Chapman, Boersma and Jantzen (1978) cited the work of Hallahan and Cruickshank (1973), which said that “the problems of the great majority of children described as LD are ‘fundamentally based in neurological function or dysfunction’ (Hallahan and Cruickshank, 1973:12). They added that “because learning involves a complex neurophysiological system, psychoneurologists often assert that when learning disorders develop something must be

wrong with the individual's brain or neurological system. A relationship between neurological processing and learning disabilities has never been proven. Rather, it has been inferred on the basis that LD children demonstrate behaviors and learning patterns similar to those of adults and other children who have 'verified' brain damage” (Chapman, Boersma & Janzen, 1978:287-288).

Another medical model by Cruickshank (1984:15) defined LD as, “of any etiological origin .. a result of perceptual processing deficits which, in turn are or may be the result of a (diagnosed or inferred) neurophysiological dysfunction occurring at prenatal, perinatal, or (in the case of linguistic dysfunction) at the postnatal periods of development.”

Therefore, in summary to both the educational and medical definitions:

- a) LD is an independent disability like other disabilities, but at times, those with LD may be accompanied with any other disabilities too.
- b) The IQ of those with LD lies above the mental impairment level and may extend to the normal level and above.
- c) Those affected with LD could suffer at any level, ranging from mild to severe.
- d) Their LD may appear in one or more of the mental processes such as attention, memory, perception, thinking and oral language.
- e) Their LD may appear throughout their life, not necessarily affecting the childhood or youth stages only and may also affect them in their career, social, technical and professional activities.
- f) Although LD may appear among the different cultural, economical and social medium, it does not necessarily mean that LD occurs among common constraints, such as cultural differences, low economic level and social status, environmental deprivation or unavailability of normal education. The talented and the more affluent may have them too (Abu Nayan, 2001).

In conclusion:

- a) LD is a general concept ascribed to heterogeneous group of disorders that include different disabilities.

- b) LD is seen a problem not during the school years but in childhood and adulthood.
- c) LD is a consequential disability of the person, ascribed to dysfunction in the central nerve system.
- d) LD may appear with other handicaps and it is also possible to be seen in the culture of the communities (Smith & Strick, 1997).

For the purpose of this study, the researcher will concentrate on the educational definitions because the present research resides within the field of education.

1.2.2.4 Teachers' Standards

There are four standards the teacher should consider to determine students with LD. They refer to the:

- a) academic disabilities of the students with LD who have difficulty in reading, writing, spelling, and organizing thoughts and arithmetic in comparison with other student in the same class and of the same age;
- b) great discrepancy between the general mental ability (intelligence) and the school achievement with the student who has LD. This phenomenon is called the discrepancy between Aptitude and Achievement;
- c) factors that are not characteristics to students with LD such as visual, hearing, mental, motor impairment, emotional disorder or any other factors; and
- d) neuropsychological disorders in LD students (Kirk, Gallagher, & Anastasion, 2003).

Special education programs are designed for these students to help them learn the general curriculum. It is important to mention these two points:

- a) All students who are diagnosed with learning disabilities have learning problems.
- b) Not all students who are suffering from academic problems have learning disabilities (Kirk, Gallagher, & Anastasion, 2003).

The researcher will use LD students in reading, writing and arithmetic, from the educational point of view, and will focus on teaching those students with reading difficulty.

1.2.3 Reading Concept

Reading is one of the important skills among the four language skills (reading, writing, listening and speaking) and it has two sides. The mechanical side is identified by letter forms and their sounds, and the ability to constitute words and sentences from them. The other side, is perceptual and thinking which lead to understanding the reading text. These two sides cannot be separated.

Reading loses its significance if any side experiences weakness or defect. Thus, it may become parrot-like when the reader is unable to comprehend the text. There is no reading if the reader is unable to read the letters, words and sentences audibly. Hence, the two sides must be present to achieve a meaningful reading. This would apply to the two kinds of reading, oral and silent reading. If it is oral (audible), then the phonic and perceptual aspect is required together; whereas, the silent reading requires the ability to translate the readable material into meanings (Ramadan & Mahmoud, 1998).

1.2.4 Reading Definition

Salah (2002) mentions that all reading definitions lie in two groups:

- a) Reading is seen as a process analyzing symbols and change the print symbols to a process sounds, presented to form pronounced language.
- b) Reading is a comprehension process, so reading helps a person to understand the content, and to change symbols to meaning.

Although there is a difference between the two groups, most researchers agree to the condition that the process of reading at least involves perception and identifying the letter, word, and understanding the meaning through the written words (Salah, 2002).

1.2.5 Reading Difficulty

The students who have reading difficulty display low reading ability and also their academic achievement is lower than the achievement level of their normal peers. Reading

difficulty also appears as the most common reason for referring to the special education programs. However, reading and writing are connected together, so those students also suffer from writing problems of language or written communication (Smith, 2004).

A number of terms have been used such as reading difficulty, poor reading, mistakes of reading, the weakness in reading and dyslexia. Reading difficulty means the student's complete incapability of reading the word, there are errors in a word, articulation, reading syllables, and errors in articulation of the sentence, omission, additions, repetition and other reading difficulties phenomena which appear in the reading of students who have normal intelligence (Al Sheikh, 2001).

1.3 Statement of the Problem

The problem of this study is that students at elementary grade are found to be weak in reading. Past researches have identified several issues and problems that contributed to this phenomenon, of which two factors are apparent, namely: the inability for students to recognize words and the inadequacy of the teaching technique itself.

According to Abu Hajaj (1996) and Al Sheikh (2001), parents of children at the elementary grade have complained that their children have problems in oral reading. The students “cannot recognize and understand a word, sentence or paragraph” (Al Isawi, 2004:28). However, there are far more researchers who found that students with reading difficulties in this elementary grade are sourced to the teaching process: as being routinized and unattractive (Abu Hajaj, 1996; Al Sheikh, 2001; Al Adel, 2001), as teaching techniques are ineffective (Al Isawi (2004) reporting the work of Al Younis) and unsuitable to the curriculum (as endorsed by the Jordan Ministry of Education based on the findings of Ramadan & Mahmoud, 1998), leading to poor student responses (Al Abdullah, 1997; Al Makahleh, 1999; Salah, 2002; Al Saedi, 2007; Mahjoub, 2000; Al Sa’ed, 2005). These researchers also found that the teaching plan is inflexible, leading to teachers’ inability to change the teaching plans among themselves, or between grades or between lessons.

Many of these researchers have suggested the approaches needed to overcome the problem. Ramadan & Mahmoud (1998) have made recommendations for a suitable plan for three types of reading: silent, oral and listening, focusing in the oral reading teaching in schools in letter, words, sentences and paragraph. In the same vein, Al Abdullah (1997), Al Makahleh (1999), Salah (2002), Al Saedi (2007), Mahjoub (2000) and Al Sa'ed (2005), have developed educational programs for reading difficulty problem among students in the Third Elementary grade (Grade Three) of whom most who cannot read are in the LD category. For instance, Al Saedi (2007) found his training program effective in improving the reading ability of students with reading difficulty. Similar studies done by Mahjoub (2000) and Al Sa'ed (2005) also showed the effectiveness of their programs in treating students with reading difficulty and which had produced very high percentage of improvement. Salah's (2002) study on the other hand, has developed a program on both reading and writing for students who had LD in the elementary grades which ultimately showed a significant difference between the control and experimental groups, favoring the experimental group ascribed to the program.

Nevertheless, more research is needed in the area of slow learning and reading difficulties, which should include a larger sample of students (Al Makahleh, 1999). Al Makahleh also suggested that more programs be used for teaching reading to the Elementary students for the purpose of helping students with reading difficulties to improve reading and writing. On the other hand, Al Abdullah (1997) pointed out that there is a need to develop teachers' skills in teaching reading. These teachers must know how to make individual programs, plan to treat these students and support them with special services. The plans should be available as resources for other schools and the most important is the need for reading test assessment at every level of general education.

Therefore, the prevalence of reading difficulty among elementary grade meant that students in government schools or special schools, in urban areas, male or female, have reading problems and this should be seen as a "most dangerous problem" (Al Isawi, 2004:28). Furthermore, students with LD are increasing as the total number of student increases yearly.

Al Khateeb (1997) estimated that the number of LD students from the total number of students is about 3%, while Lyon (1995) stipulated that 80% of LD students have reading difficulty. Hence, in the case of Jordan, when the number of Jordan school students is around 1,439,845 (Jordan Ministry of education (2005-2006), that means the number of LD students is 43,195 and thus, Jordan has about 34, 556 students suffering from reading difficulty.

It is now very important to find new strategies to help teachers teach reading to the students in the elementary grade. So, the researcher is developing a special method to assist teachers to teach reading skills and to test its effectiveness when used with students with reading difficulty at the Grade Three. In the present study, the effectiveness of the proposed reading method is determined by measuring the significant differences in achievement scores between two groups: one group which is given the presently used reading method and another group which has the proposed reading method.

1.4 Rationale of the Study

The idea of the study came when the researcher read about the high failure and drop-out rates in the elementary grades in schools. According to the report by the Princess Sarvath College (2006), between 15-20 per cent of the failed students in schools has LD. And during school visits, the researcher saw that the traditional teaching method was not suitable for students who have problems in reading. Also a lot of parents complained that their children cannot read or were weak in oral reading, word recognition, and in understanding the words and paragraphs. That means a big number of students in the elementary grade failed in reading and finished their elementary grade without knowing how to read. This is a dangerous problem for the country (Al Isawi, 2004). This has been strongly supported from the many previous studies, among others, Abu Hajaj (1996), Al Sheikh (2001) and Ramadan & Mahmoud (1998), who corroborated that that students in elementary grade, have reading difficulty.

1.5 Theoretical Framework

The current study is based on Vygotsky's social development theory and Gillingham's method for reading. These theories are discussed below.

1.5.1 Social Development Theory

Vygotsky is the leader of the social development theory of learning. He suggested that social interaction influences cognitive development. Central to Vygotsky's theory is his belief that biological and cultural development do not occur in isolation (Driscoll, 1994).

Vygotsky approached development differently from Piaget. Piaget believed that cognitive development consists of four main periods of cognitive growth: sensorimotor, preoperational, concrete operations, and formal operations (Saettler, 1990;331). Piaget's theory suggests that development has an endpoint in goal. However, Vygotsky believed that development is a process that should be analyzed, instead of a product to be obtained. According to Vygotsky, the development process that begins at birth and continues until death is too complex to be defined by stages (Driscoll, 1994; Hausfather, 1996).

Lifelong process of learning development, according to Vygotsky, is dependent on social interaction and that social learning actually leads to cognitive development. This phenomenon is the Zone of Proximal Development (ZPD). Vygotsky (1978:86) describes it as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers". In other words, a student can perform a task under adult guidance or with peer collaboration that could not be achieved alone. The Zone of Proximal Development bridges that gap between what is known and what can be known. Vygotsky claimed that learning occurred in this zone.

Therefore, Vygotsky focused on the connections between people and the cultural context in which they act and interact in shared experiences (Crawford, 1996). According to Vygotsky, humans use tools that develop from a culture, such as speech and writing, to

mediate their social environments. Initially children develop these tools to serve solely as social functions, ways to communicate needs. Vygotsky believed that the internalization of these tools led to higher thinking skills. When Piaget observed young children participating in egocentric speech in their preoperational stage, he believed it was a phase that disappeared once the child reached the stage of concrete operations. In contrast, Vygotsky viewed this egocentric speech as a transition from social speech to internalized thoughts (Driscoll, 1994). Thus, Vygotsky believed that thought and language could not exist without each other.

Vygotsky's theory of Social Development has three assumptions in which educators can "examine possible contextual influences related to teaching and learning in schools" (Kraker, 2000:295-296). These three assumptions are:

Firstly, socio-cultural theory maintains that learning and development are motivated by cultural and social influences (Forman et al., 1993; Vygotsky, 1962, 1978). This means that the relationships among cultural, historical, and institutional settings motivate learning and development. Consequently, teachers in particular schools are responsible for the design of educational programmes that play a good role in establishing distinctive contexts for learning and development. These programmes must be consistent with the cultural and linguistic background of students.

Secondly, socio-cultural theory maintains that direct instruction and assistance from adults will play a good role in promoting development and cognitive change. This change can be established through guided practice and appropriation. The notion of guided practice suggests that novices could gain control over routines and cultural tasks under the guidance and assistance of adults, or experts. Appropriation is defined as the active participation of learners as they acquire new knowledge or extend their understanding of known concepts.

Thirdly, socio-cultural theory maintains that the social environment can change the course of development. This theory offers a dynamic approach for the study of patterns of effective teacher-student interaction that include observation of linguistic and cultural variables that influence learning.

1.5.1.1 Application of the Social Development Theory to Instructional Design

Traditionally, schools in Jordan have promoted environments in which the students play an active role in their own education as well as their peers. Vygotsky's theory, however, requires the teacher and students to play untraditional roles as they collaborate with each other. Instead of a teacher dictating his/her meaning to students for future recitation, a teacher should collaborate with his/her students in order to create meaning in ways that students can make their own (Hausfather, 1996). Learning becomes a reciprocal experience for the students and teacher.

The physical classroom, based on Vygotsky's theory, would provide clustered desks or tables and work space for peer instruction, collaboration, and small group instruction. Like the environment, the instructional design of material to be learned would be structured to promote and encourage student interaction and collaboration. Thus the classroom becomes a community of learning.

Because Vygotsky asserts that cognitive change occurs within the zone of proximal development, instruction would be designed to reach a developmental level that is just above the student's current developmental level. Vygotsky proclaims, "learning which is oriented toward developmental levels that have already been reached is ineffective from the view point of the child's overall development. It does not aim for a new stage of the developmental process but rather lag behind this process" (Vygotsky, 1978:89).

Appropriation is necessary for cognitive development within the zone of proximal development. Individuals participating in peer collaboration or guided teacher instruction must share the same focus in order to access the zone of proximal development. Furthermore, it is essential that the partners be on different developmental levels and the higher level partner be aware of the lower level. If this does not occur, or if one partner dominates, the interaction is less successful (Driscoll, 1994; Hausfather, 1996).

1.5.1.2 Instructional Strategies and their Implementation in Instruction

Effective instructional strategies are imperative in teaching; be it in the general curriculum for normal students or for special education, as they have positive relationships with student's achievement.

Strategies such as scaffolding and reciprocal teaching are known to be effective strategies to access the zone of proximal development. Scaffolding requires the teacher to provide students the opportunity to extend their current skills and knowledge. The teacher must engage students' interest, simplify tasks so they are manageable, and motivate students to pursue the instructional goal. In addition, the teacher must look for discrepancies between students' efforts and the solution, control for frustration and risk, and model an idealized version of the act (Hausfather, 1996). Reciprocal teaching allows for the creation of a dialogue between students and teachers. These two ways, the scaffolding and reciprocal teaching, become good instructional strategies through encouraging students to go beyond answering questions and engage in the discourse (Driscoll, 1994; Hausfather, 1996). A study conducted by Brown and Palincsar (1989), demonstrated the effectiveness of Vygotskian approach with reciprocal teaching methods in their successful program to teach reading strategies. The teacher and students alternated turns leading small group discussions on a reading. After modeling four reading strategies, students began to assume the teaching role. Results of this study showed significant gains over other instructional strategies (Driscoll, 1994; Hausfather, 1996). Cognitively Guided Instruction is another strategy to implement Vygotsky's theory. This strategy involves the teacher and students exploring math problems and then sharing their different problem solving strategies in an open dialogue (Hausfather, 1996).

1.5.2 Gillingham's Method for Reading

According to the revised text on Gillingham's method (Gillingham and Stillman, 1997), it is said that approximately one child in ten fails to learn to read, write or spell

satisfactorily, due to a specific language disability, and these children become confused and frustrated when taught by traditional methods. Anna Gillingham was working closely with Dr. Samuel Orton on a study of the learning problems of children with reading difficulty, when she developed and tested remedial techniques with these children. Her method, teaching techniques and appropriate resources have since been known as the Gillingham Manual.

The Gillingham method whose approach can also be seen as a “word-building-method” (Gillingham and Stillman, 1997:29) is a technique referred to as the “language triangle” or “multisensory approach” where word-building link between what the student sees in print (VISUAL), what the student hears (AUDITORY), and what the student feels as he makes the sounds of the letters and writes (KINESTHETIC – large muscle movements, and tactile – sensations in the mouth and on the fingertips) (Gillingham and Stillman, 1997:30).

The Gillingham method applies the phonics (alpha-phonetic) approach and may be used with individuals or small groups. According to Gillingham and Stillman (1997:29), “the technique starts with individual sounds and then uses these sounds to build words”. This introduces the letters to the students. Gillingham has also developed the materials, namely the phonic drill cards (Gillingham and Stillman, 1997). The cards comprise consonant and vowel phonograms, colour coded to differentiate them and letters are taught by the pronunciation of the key word to initiate the sound.

After some ten letters are learned, the blending into words begins. According to Gillingham and Stillman (1997:34) at this level, “reading is only translating seen symbols into speech sounds”. The drill cards from the group of learned letters are spread out and the students give the sounds of these letters in succession and repeat the series of sounds while increasing speed and smoothness, until eventually the student will be able to blend the sounds and “words containing blends can now be used in building sentences; as stories for reading and dictation” (Gillingham and Stillman, 1997:47).

Next, the syllable concept is introduced. “A syllable is a word or part of a word [and] is composed of one or more letters with one vowel sound and is produced by one impulse of the voice” (Gillingham and Stillman, 1997:51). “These are called one-syllable words or

monosyllable” (Gillingham and Stillman, 1997:45). Others may have two letters and a few have four letters.

“Before a student attempts to read words of more than one syllable, he must be able to read separate syllables that are parts of larger words” (Gillingham and Stillman, 1997:53); called the phonetic syllables. “The teacher asks the student to read real words of more than one syllable printed with the syllables apart”; [usually printed on a card] (Gillingham and Stillman, 1997:54). It is important that the students do syllable exercises three or four times a week.

In preparing the student to read, the teachers will create sentences (and stories) to include those words. However, it is necessary to include sight-words (words that have not been taught, for e.g. “the”, “is”, “and”). When the student requires help in reading, the teacher will assist immediately.

The application of the Gillingham method prevails in language clinics associated with schools, universities and hospitals. Moreover reading specialists and remedial teachers have used the approach in certain programs in special classes, for individual tutoring, and made adaptations when teaching illiterate adults and for preventing reading difficulty in developing countries. Some researchers have demonstrated that the Gillingham method is suitable for students who have reading difficulty (Qahtan, 2004; Al Makahleh, 1999; Al Zaiat, 1998; Salah, 2002). So do other studies that have reported on the effectiveness of the Orton-Gillingham and Orton-Gillingham based instructional programs, reporting on positive outcomes across settings and populations (Hook et al., 2001; Joshi et al., 2002).

1.5.2.1 The Integration of Vygotsky’s theory and Gillingham’s method

The presently used reading method in Jordan is taken from the Jordan Ministry Of Education (2005-2006b). This method is designed for normal students and taught by teachers from the Ministry. Where LD students with reading difficulty are concerned, the presently used reading method is highly likely unsuitable for their learning.

In this study, the researcher will advance a framework that integrates both the social development theory and the Gillingham method for teaching reading to reading difficulty students (as depicted in Figure 1.1).

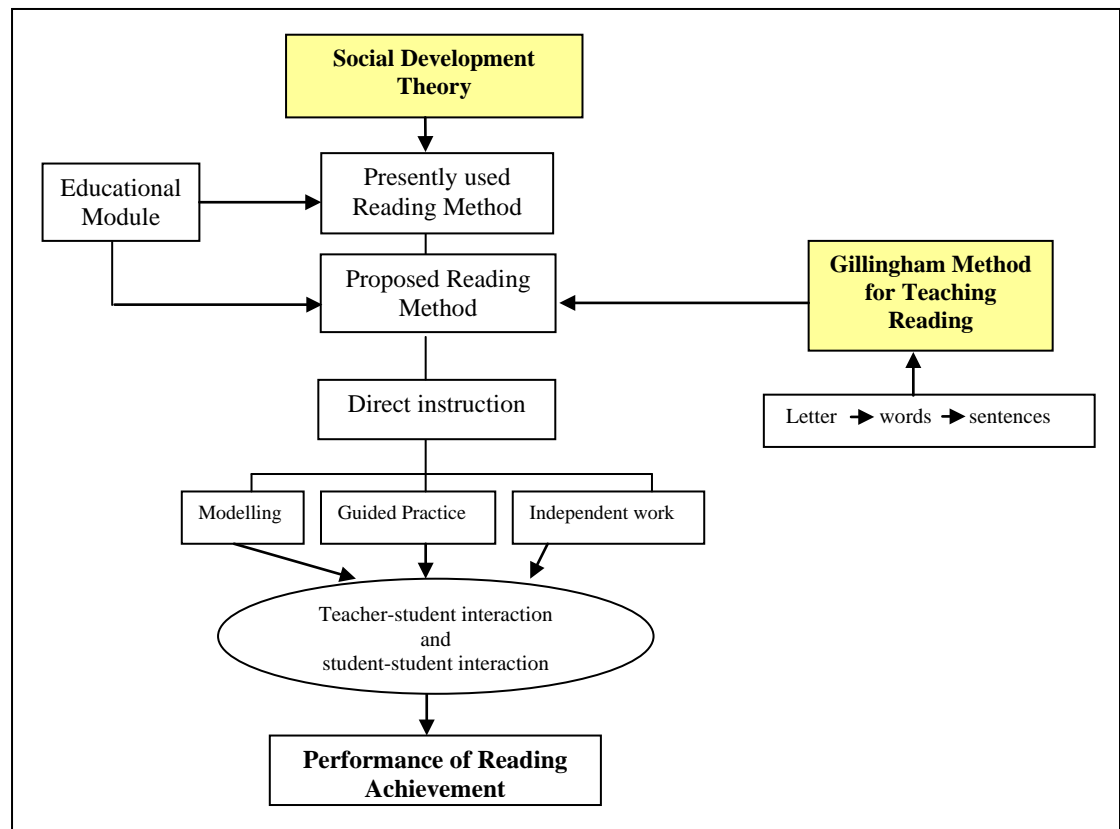


Figure 1.1: Theoretical Framework of the Study

These theories suggest that the reading performance of students depends on the design of the proposed educational module. The researcher's proposed reading method incorporates the social development theory already present in the presently used reading method and the Gillingham method for teaching reading. Both approaches are implemented through direct instruction. Smith (2008:3) explained that, "the term direct instruction has evolved to include any teacher-directed approach to instruction that involves the components of explicit step-by step instruction and student mastery at each step", and in the proposed reading method, the characteristics include: independent work, guided practice and modeling. In essence, direct instruction emphasized the explicit instruction in the use of phonics - based on sound training of letters, syllables, words and sentences in an organized way. On the other

hand, direct instruction promotes interaction to help the students with reading difficulties to improve their reading abilities through the ‘teacher-student’ and ‘student-student’ collaboration during practices. This approach corresponds to the curriculum from Jordan Ministry of Education (2005-2006b) which has assimilated Vygotsky’s socio-cultural principles through teacher-student interaction; teacher-student group discussions; guided practice; student-student interaction; the use of culture in communication; children's play and reciprocal teaching. The full analysis of the comparison is found in Section 3.5.1 and Table 3.3 in Chapter 3.

1.6 Purpose of the Study

This study in general aims to evaluate the effectiveness of the educational module in the teaching of reading skills to the LD students who have reading difficulty. The objectives are:

- 1) To develop a proposed reading method for teaching reading skills to reading difficulty students among the LD students.
- 2) To ascertain the suitability of the teaching techniques of the proposed reading method to the reading difficulty students with LD.
- 4) To study the effectiveness of the proposed reading method in teaching reading skills to the reading difficulty students among the LD students.

1.7 Research Questions

Through this study, the researcher will answer the following questions:

- RQ 1) Is there any statistical significant difference ($\alpha = 0.05$) between the means of the post-test scores in the control group which used the presently used method, and the experimental group which used the proposed reading method?

- RQ 2) Are there any statistical significant differences ($\alpha = 0.05$) between the means of the post-test scores of the two groups regarding their performance in the five units such as letters, words, syllables, sentences and paragraph?
- RQ 3) To what extent do the teaching techniques in the proposed reading method meet the needs of the reading difficulty students?

1.8 Hypotheses

The researcher proposed to test six null hypotheses for research questions one and two. These are:

- H₀1: There is no statistical significant difference ($\alpha = 0.05$) in the means of the post-test scores between the control group which used the presently used method, and the experimental group which used the proposed reading method.
- H₀2: There is no statistical significant difference ($\alpha = 0.05$) between the means of the post-test scores of the two groups regarding their performance in the letters unit.
- H₀3: There is no statistical significant difference ($\alpha = 0.05$) between the means of the post-test scores of the two groups regarding their performance in the words unit.
- H₀4: There is no statistical significant difference ($\alpha = 0.05$) between the means of the post-test scores of the two groups regarding their performance in the syllables unit.
- H₀5: There is no statistical significant difference ($\alpha = 0.05$) between the means of the post-test scores of the two groups regarding their performance in the sentences unit.
- H₀6: There is no statistical significant difference ($\alpha = 0.05$) between the means of the post-test scores of the two groups regarding their performance in the paragraphs unit.

1.9 The Method of Approach

In order to answer the research questions and test the hypotheses, the researcher chooses to study two groups of students. The two groups are referred to as the experimental and the control groups. These groups are given the pre-reading test to complete at the initial

stage of the study. Then the experimental group is given the proposed reading method to adopt for seven weeks. On the other hand, the control group is given the presently used reading method in the same period, i.e. the Jordan Ministry of Education curriculum (2006). After the seventh week, upon completion of the teaching reading method on the experimental group a test is given to the students. The test is also given to the control group and this is known as the post-test. The instrument used to evaluate the achievement of the two groups is called the Reading Test Instrument. The effectiveness of the proposed reading method is attained when students from the experimental group showed significantly better scores than the control group who were given the presently reading method. Figure 1.2 shows the conceptual framework for the study of the effectiveness of the new program for students with LD, in Jordan.

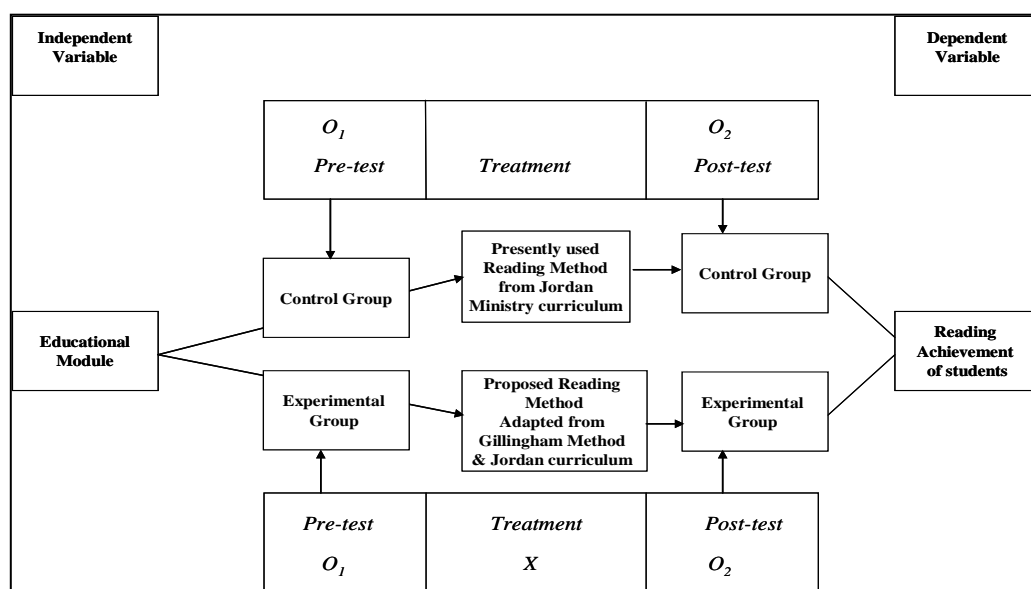


Figure 1.2: Research Design for the Effectiveness of a Proposed Reading Method for LD Students with Reading Difficulty

1.10 Significance of the Study

The significance of the study should see to the advancement of educational theory as well as policy-making in Special Education where -

- 1) At the national level: The total number of students with reading difficulty was 34,556 (see end of Section 1.3) in a country of five million population This becomes a national

problem because it affects the future of the country when the elementary school students impact the literacy rate at the national level. It is hoped that the proposed reading method can become a tool to promote reading skills among the Elementary school students especially targeting those who have reading difficulty.

- 2) At the student's level: The ability to read at the elementary grade will subsequently protect LD students from emotional and psychological disorders caused by depression and anxiety due to negative social acceptance. If they can read, it will increase their self-confidence and ensure their performance in academic achievement.
- 3) At the teacher's level: Perhaps, the finding of this study might help language teachers in teaching reading to the elementary students as these may introduce a new strategy that may assist them to introduce a proper educational environment and provide richer experiences. It is also possible that this will make the reading class more enjoyable to both the teachers and students.
- 4) At the level of the language teaching officials: The study will help these officials to use new measuring tools, techniques and strategies from the new method used in teaching reading.

1.11 Limitations of Study

The study was conducted in Jordan within the scope of teaching reading skills to elementary school students who have LD. The Zarqa Education Department has agreed to the study, but this education department is one of the three that exist and this may not be representative of the Jordan Education Ministry. The data collection period was scheduled between 15th September - 15th December 2007, so as to coincide with the new academic year for schools. That meant the researcher had very tight time constraints to select his sample, administer his proposed reading method and to conduct the Reading Test consecutively.

1.12 Definition of Terms

1) Learning Disabilities (LD)

A group of students who have disabilities in academic skills: reading, writing and arithmetic, and are given the Individualized Educational and Instructional Plan to treat the deficiency those skills, in order to help them reach a level of education close to that of their peers in the regular classroom.

2) Presently Used Reading Method

It is an English curriculum which is prepared for the First, Second and Third grade elementary school by the Jordan Ministry of Education. The curriculum is taught by the teachers of Ministry of Education according to the plan designed by Ministry. This method is used for the control group in the normal class.

3) Proposed Reading Method

The method is designed and developed by the researcher based on Gillingham phonemic method, Vygotsky Social Development theory and the curriculum of the Jordan Ministry of Education for the first, second and third year elementary school. A teacher guide which includes the techniques, activities and instruments, are provided to help the teacher teach the students who have reading difficulty.

4) Reading Difficulty

In this study, reading difficulty is a phenomenon in which texts cannot be read well, such as: having difficulty in reading the words, grossly mispronouncing words, word by word reading, phrasing improperly, omissions, repetition and additions.

5) Student with Reading Difficulty

The student with reading difficulty will not be able to read his text while he has normal intelligence. This student will be sent to the resource room to learn the proposed reading method.